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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,421	06/30/2003	Volkan Kursun	000687-00302	8087
27557	7590	09/03/2004	EXAMINER	
BLANK ROME LLP 600 NEW HAMPSHIRE AVENUE, N.W. WASHINGTON, DC 20037			TRAN, ANH Q	
			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,421

Applicant(s)

KURSUN ET AL.

Examiner

Anh Q. Tran

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 19-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/30/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention: Group I, claims 1-18 directed to a domino logic gate; Group II, claims 19-25 directed to a reference generation circuit.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over

the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Michael Greenbaum on 8/19/04 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-25 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Krishnamurthy et al (6,346,831).

Krishnamurthy shows:

1. a domino logic circuit (Fig. 6, 7, 8) comprising: a pulldown circuit having a dynamic node (Q, Fig. 7; A, Fig. 6); a keeper (M16, M24) connected to the pulldown circuit at the dynamic node; and a source (174) of a body bias voltage, the source of the body bias voltage being connected to the keeper to supply the body bias voltage (Vbbn) to the keeper to bias the keeper.

2. The domino logic circuit of claim 1, wherein the body bias voltage is a reverse body bias voltage (col. 4, lines 45-52).

3. The domino logic circuit of claim 2, wherein the reverse body bias voltage is static (constant, col. 4, line 49).

4. The domino logic circuit of claim 3, further comprising a foot transistor (M20, Fig. 6) for connecting the pulldown circuit to ground.

5. The domino logic circuit of claim 3, wherein the pulldown circuit is connected to ground without an intervening foot transistor (112, Fig. 7).

6. The domino logic circuit of claim 2, wherein source supplies the reverse body bias voltage such that the reverse body bias voltage alternates between two values (changing voltages, col. 4, line 49).

7. The domino logic circuit of claim 6, further comprising a foot transistor (M20, Fig. 6) for connecting the pulldown circuit to ground.

8. The domino logic circuit of claim 6, wherein the pulldown circuit is connected to ground without an intervening foot transistor (112, Fig. 7).

9. The domino logic circuit of claim 1, wherein the body bias voltage is a forward body bias voltage (col. 7, lines 20-36).

10. The domino logic circuit of claim 9, wherein the forward body bias voltage is static (constant, col. 4, line 49).

11. The domino logic circuit of claim 10, further comprising a foot transistor (M20, Fig. 6) for connecting the pulldown circuit to ground.

12. The domino logic circuit of claim 10, wherein the pulldown circuit is connected to ground without an intervening foot transistor (112, Fig. 7).

13. The domino logic circuit of claim 9, wherein source supplies the forward body bias voltage such that the forward body bias voltage alternates between two values (changing voltages, col. 4, line 49).

14. The domino logic circuit of claim 13, further comprising a foot transistor (20, Fig. 6) for connecting the pulldown circuit to ground.

15. The domino logic circuit of claim 13, wherein the pulldown circuit is connected to ground without an intervening foot transistor (112, Fig. 7).

16. The domino logic circuit of claim 1, wherein source supplies the body bias voltage such that the body bias voltage alternates between a first forward body bias voltage value and a second reverse body bias voltage value (changing voltages, col. 4, line 49).

17. The domino logic circuit of claim 16, further comprising a foot transistor (20, Fig. 6) for connecting the pulldown circuit to ground.

18. The domino logic circuit of claim 16, wherein the pulldown circuit is connected to ground without an intervening foot transistor (112, Fig. 7).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Krishnamurthy et al (6,204,696) discloses a domino logic gate with keeper circuit having body bias.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Q. Tran whose telephone number is 571-272-1813. The examiner can normally be reached on M-TH (7:00-5:30) Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Tokar can be reached on 571-272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anh Q. Tran
Examiner
Art Unit 2819



8/19/04